



December 18, 2007

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PRO

Attn: Jaime L. Bauer
DEQ-Piedmont Regional Office
4949 A-Cox Road
Glen Allen, VA 23060

Subject: VDOT Brunswick Rest Area VPDES Permit Package

Dear Ms. Bauer,

On behalf of Virginia Department of Transportation (VDOT), Timmons Group is pleased to submit the application package for the re-issuance of the I-85 Brunswick Rest Area WWTP VPDES permit.

Please find enclosed six (6) copies of the completed permit application package for your review and approval. Should you have any questions regarding this permit modification application, please don't hesitate to call me at (804) 200-6393.

Sincerely,

Ignatius Mutoti, PhD, PE
Timmons Group

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FORM
2A
NPDES**NPDES FORM 2A APPLICATION OVERVIEW****APPLICATION OVERVIEW**

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

VDOT Brunswick County Rest Area VA0061379

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name VDOT Brunswick County Rest Area

Mailing Address Virginia Department of Transportation (VDOT)
1401 East Broad Street, Richmond, VA 23219

Contact person Mr. Jacob Porter

Title Special Facilities Program Manager, Asset Management Division, VDOT

Telephone number (804) 662-9615

Facility Address Interstate 85 Northbound - mile marker 32
(not P.O. Box) Alberta, VA 23821

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Virginia Department of Transportation (VDOT)

Mailing Address 1401 East Broad Street
Richmond, VA 23219

Contact person Mr. Jacob Porter

Title Special Facilities Program Manager, Asset Management Division, VDOT

Telephone number (804) 662-9615

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA 0061379 PSD _____

UIC _____ Other _____

RCRA _____ Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>I-85 Brunswick Rest Area</u>	<u>7,200 per day</u>	<u>Separate Sanitary</u>	<u>State</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served <u>7,200 per day</u>			

FACILITY NAME AND PERMIT NUMBER:

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A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 0.036
- mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>0.0079</u>	<u>0.0074</u>	<u>0.0078</u> mgd
c. Maximum daily flow rate	<u>0.0136</u>	<u>0.0149</u>	<u>0.0133</u> mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %
☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?
- ☒
- Yes
- ☐
- No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1
ii. Discharges of untreated or partially treated effluent _____
iii. Combined sewer overflow points _____
iv. Constructed emergency overflows (prior to the headworks) _____
v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

_____ Yes

_____ ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Alberta 23821
(City or town, if applicable) (Zip Code)
Brunswick VA
(County) (State)
36° 51' 35" N 77° 50' 40" W
(Latitude) (Longitude)
- c. Distance from shore (if applicable) _____ ft.
- d. Depth below surface (if applicable) _____ ft.
- e. Average daily flow rate 0.0078 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? _____ Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? _____ Yes ☒ No

A.10. Description of Receiving Waters.

- a. Name of receiving water Unnamed Tributary of Sturgeon Creek
- b. Name of watershed (if known) _____
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): Chowan River and Dismal Swamp
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____
- d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of CaCO₃

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A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☒ Secondary☐ Advanced☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal

85-94.9 %

Design SS removal

85-94.9 %

Design P removal

%

Design N removal

%

Other _____

%

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒

Yes

☐ No

- d. Does the treatment plant have post aeration?

☒

Yes

☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.25	s.u.			
pH (Maximum)	8.00	s.u.			
Flow Rate	0.0133	mgd	0.0078	mgd	300
Temperature (Winter)	11.6	deg C	7.6	deg C	31
Temperature (Summer)	30.1	deg C	27.5	deg C	31

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	21.0	mg/L	9.7	mg/L	90	5210	1.0 mg/L
	CBOD-5	-		-			-	-
FECAL COLIFORM		-		-			-	-
TOTAL SUSPENDED SOLIDS (TSS)		21.0	mg/L	16.3	mg/L	90	160.2	1.0 mg/L

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

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BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day). (n/a)

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.
_____ gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____ Yes ____ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.
____ Yes ____ No

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- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

(N/A)

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: _____

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

VDOT Brunswick County Rest Area VA0061379

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Mr. Jacob Porter, Special Facilities Program Manager - Asset Management DivisionSignature Telephone number (804) 662-9615Date signed 12/7/07

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

VDOT Brunswick County Rest Area VA0061379

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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA (N/A)

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLOROETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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PART E. TOXICITY TESTING DATA (N/A)

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ____ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

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Test number: _____

Test number: _____

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

___ Yes ___ No

If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES (N/A)

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

___ Yes ___ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

- a. Number of non-categorical SIUs. _____
- b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

- a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (___ continuous or ___ intermittent)

- b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (___ continuous or ___ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

- a. Local limits ___ Yes ___ No
- b. Categorical pretreatment standards ___ Yes ___ No

If subject to categorical pretreatment standards, which category and subcategory?

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F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☐ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.) ☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous ☐ Intermittent If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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PART G. COMBINED SEWER SYSTEMS

(N/A)

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number _____
- Location _____
(City or town, if applicable) (Zip Code) _____
(County) (State) _____
(Latitude) (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

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- c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

- a. Name of receiving water: _____

- b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

- c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

**END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE.**

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? ☒ Yes ☐ No

Does this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? ☐ Yes ☒ No

Is sewage sludge from this facility applied to the land? ☐ Yes ☒ No

If you answered Yes to either, answer the following three questions:

a. Does the sewage sludge from this facility meet the pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
☐ Yes ☐ No

b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away?
☐ Yes ☐ No

c. Is sewage sludge from this facility sent to another facility for treatment (including blending) or placement in a bag or other container for sale or give-away? ☐ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).

5. All applicants must complete Section E (Certification).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.
 - a. Facility name: VDOT BRUNSWICK COUNTY REST AREA
 - b. Facility contact: Name: Jacob Porter
Title: Special Facilities Program Manager, Asset Management Division
Phone: (804) 662-9615
 - c. Facility mailing address:
Street or P.O. Box: 1401 East Broad Street
City or Town: Richmond State: VA Zip: 23219
 - d. Facility location:
Street or Route: Interstate 85 Northbound - mile marker 32
County: Brunswick
City or Town: Alberta State: VA Zip: 23821
 - e. Facility latitude: 36°51'45" N Facility longitude: 77°50' 14" W
 - f. Is this facility a Class I sludge management facility? Yes X No If yes, submit the results of a toxicity characteristic leaching procedure (TCLP) performed on this facility's sewage sludge. Submit the results of all TCLPs performed during the last five years, if not previously submitted.
 - g. Facility design influent flow rate: 0.036 mgd
 - h. Total population served: 2,800 per day
 - i. Indicate the type of facility:
X Publicly owned treatment works (POTW)
 Privately owned treatment works
 Federally owned treatment works
 Blending or treatment operation
 Surface disposal site
 Other (describe):
2. Permit Information.
 - a. Facility's VPDES permit number (if applicable): VA 0061379
 - b. List below all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
Permit Number: Type of Permit:
VA 0061379 VPDES
3. Owner/Operator Information
 - a. Are you the owner of this facility? X Yes No If no, provide the owner's:
Name:
Street or P.O. Box:
City of Town: State: Zip:
Phone:
 - b. Are you the operator of this facility? Yes X No If no, provide the operator's:
Name: DTH Contracting
Street or P.O. Box: P.O. Box 458
City of Town: Dunn State: NC Zip: 28335
Phone: (910) 892-4266
4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes X No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility: **(Refer Tab F)**
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, treated, land applied or disposed.
 - Location of all water bodies within one mile beyond the facility's property boundaries.
 - Location of all wells used for drinking water listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. **(Refer Tab G)**
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? X Yes No
If yes, provide the following for each contractor (attach additional pages if necessary).
Name: DTH Contracting
Street or P.O. Box: P.O.Box 458
City or Town: Dunn State: NC Zip: 28335
Phone: (910) 892-4266
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge: 00-142-0031H
- If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a legible copy(s) of the contract or a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s). **(Refer Tab H)**
- Provide a legible copy of any leasing agreements related to treatment and storage facilities not under direct ownership of the applicant, which identifies the parties involved.
DTH Contracting is responsible for the operation of the facility.
Long and Associates is responsible for the handling and removal of the sewage sludge.
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. N/A

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
Total dry metric tons per 365-day period generated at your facility: 4.84 dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
 - a. Facility name: N/A
 - b. Contact Person:
Title:
Phone:
 - c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
 - d. Facility Address:
(not P.O. Box)
 - e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
 - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3. Treatment Provided at Your Facility.
 - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
____ Class A ____ Class B X Neither or unknown
 - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: **Sludge is stored in holding tank and periodically pumped and hauled offsite for treatment/disposal.**
 - c. Which vector attraction reduction option is met for the sewage sludge at your facility?
____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
____ Option 8 (90 percent solids with unstabilized solids)
X None or unknown
 - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: **Dry sludge cake on top of holding tank provides an impervious barrier to vectors.**
 - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A
4. **N/A** Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
 - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons
 - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
____ Yes ____ No

5. N/A Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Facility name: Henrico County Water Reclamation Facility (Sludge is put into Hanover discharge system via receiving manhole on Richfood Road)
- b. Contact Person: Wayne Burgess
Title: Pre-Treatment Coordinator
Phone: 804-795-9301
Mailing address:
Street or P.O. Box: P.O. Box 27032
City or Town: Richmond State: VA Zip: 23273
- c. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 4.84 dry metric tons.
- d. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

<u>Permit Number:</u>	<u>Type of Permit:</u>
<u>VA0063690</u>	<u>VPDES</u>
- e. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? X Yes No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
 Class A Class B Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: anaerobic digestion, dewatering and land application
- f. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? X Yes No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
X Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: anaerobic digestion, dewatering and land application
- g. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
 Yes X No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
- h. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
- i. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-

away for application to the land? ☐ Yes ☒ No

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

7. N/A Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____ dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. N/A Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
☐ Yes ☐ No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ☐ Site Owner ☐ Site operator
- e. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:
Permit Number: _____ Type of Permit: _____

9. N/A Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons
- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
☐ Yes ☐ No
If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
- c. Incinerator name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ☐ Incinerator Owner ☐ Incinerator Operator
- e. Mailing address.
Street or P.O. Box:

- City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons
- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:
Permit Number: _____ Type of Permit: _____

10. N/A Disposal in a Municipal Solid Waste Landfill.

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name:
- b. Landfill Contact:
Title: _____
Phone: _____ Contact is: ☐ Landfill Owner ☐ Landfill Operator
- c. Mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
- d. Landfill location.
Street or Route #: _____
County: _____
City or Town: _____ State: _____ Zip: _____
- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill: _____ dry metric tons
- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:
Permit Number: _____ Type of Permit: _____

- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill? ☐ Yes ☐ No
- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? ☐ Yes ☐ No
- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? ☐ Yes ☐ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported.

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE (N/A)

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:

The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or

The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or

You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).

Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site.

a. Site name or number:

b. Site location (Complete i and ii)

i. Street or Route#:

County:

City or Town: _____ State: _____ Zip: _____

ii. Latitude: _____ Longitude: _____

Method of latitude/longitude determination

_____ USGS map _____ Filed survey _____ Other

c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.

a. Are you the owner of this land application site? ☐ Yes ☐ No

b. If no, provide the following information about the owner:

Name:

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

Phone: ()

3. Applier Information:

a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? ☐ Yes ☐ No

b. If no, provide the following information for the person who applies the sewage sludge:

Name:

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

Phone: ()

c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:

Permit Number:

Type of Permit:

4. Site Type. Identify the type of land application site from among the following:

☐ Agricultural land

☐ Reclamation site

☐ Forest

☐ Public contact site

☐ Other. Describe

5. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

☐ Yes ☐ No If yes, answer a and b.

a. Indicate which vector attraction reduction option is met:

☐ Option 9 (Injection below land surface)

☐ Option 10 (Incorporation into soil within 6 hours)

b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

6. Cumulative Loadings and Remaining Allotments.

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

- a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? ☐ Yes ☐ No

If no, sewage sludge subject to the CPLRs may not be applied to this site.

If yes, provide the following information:

Permitting authority:

Contact person:

Phone: ()

- b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? ☐ Yes ☐ No If no, skip the rest of Question 6. If yes, answer questions c - e.

- c. Site size, in hectares: _____ (one hectare = 2.471 acres)

- d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

Facility name:

Facility contact:

Title:

Phone: ()

Mailing address.

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

- e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	<u>Cumulative loading</u>	<u>Allotment remaining</u>
Arsenic	_____	_____
Cadmium	_____	_____
Copper	_____	_____
Lead	_____	_____
Mercury	_____	_____
Nickel	_____	_____
Selenium	_____	_____
Zinc	_____	_____

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter.

PCBs (mg/kg)

pH (S. U.)

Percent Solids (%)

Ammonium Nitrogen (mg/kg)

Nitrate Nitrogen (mg/kg)

Total Kjeldahl Nitrogen (mg/kg)

Total Phosphorus (mg/kg)

Total Potassium (mg/kg)

Alkalinity as CaCO₃* (mg/kg)

*Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent CaCO₃.

8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
 - 1) Water wells, abandoned or operating
 - 2) Surface waters
 - 3) Springs
 - 4) Public water supply(s)
 - 5) Sinkholes
 - 6) Underground and/or surface mines
 - 7) Mine pool (or other) surface water discharge points
 - 8) Mining spoil piles and mine dumps
 - 9) Quarry(s)
 - 10) Sand and gravel pits
 - 11) Gas and oil wells
 - 12) Diversion ditch(s)
 - 13) Agricultural drainage ditch(s)
 - 14) Occupied dwellings, including industrial and commercial establishments
 - 15) Landfills or dumps
 - 16) Other unlined impoundments
 - 17) Septic tanks and drainfields
 - 18) Injection wells
 - 19) Rock outcrops
- b. A topographic map of sufficient detail to clearly show the following information:
 - 1) Maximum and minimum percent slopes
 - 2) Depressions on the site that may collect water
 - 3) Drainageways that may attribute to rainfall run-on to or runoff from this site
 - 4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding
- c. Data and specifications for the storage facility lining material.
- d. Plan and cross-sectional views of the storage facility.
- e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.

10. Landowner Agreement Forms. Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.

11. Ground Water Monitoring.

Are any ground water monitoring data available for this land application site? ☐ Yes ☐ No

If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

- a. Provide a general location map for each county which clearly indicates the location of all the land application sites.
- b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.
- c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service
Virginia Field Office
P. O. Box 480
White Marsh, VA 23183
TEL: (804)693-6694

Provide a copy of the notification letter with this application form.
- d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)

Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

 - 1) Soil symbol
 - 2) Soil series, textural phase and slope range
 - 3) Depth to seasonal high water table
 - 4) Depth to bedrock
 - 5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

- e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:
 - 1). Soil symbol
 - 2). Soil series, textural phase and slope range
 - 3). Depth to seasonal high water table
 - 4). Depth to bedrock
 - 5). Estimated soil productivity group (for the proposed crop rotation)

- f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.
- Soil Organic Matter (%)
 - Soil pH (std. units)
 - Cation Exchange Capacity (meq/100g)
 - Total Nitrogen (ppm)
 - Organic Nitrogen (ppm)
 - Ammonia Nitrogen (ppm)
 - Nitrate Nitrogen (ppm)
 - Available Phosphorus (ppm)
 - Exchangeable Potassium (mg/100g)
 - Exchangeable Sodium (mg/100g)
 - Exchangeable Calcium (mg/100g)
 - Exchangeable Magnesium (mg/100g)
 - Arsenic (ppm)
 - Cadmium (ppm)
 - Copper (ppm)
 - Lead (ppm)
 - Mercury (ppm)
 - Molybdenum (ppm)
 - Nickel (ppm)
 - Selenium (ppm)
 - Zinc (ppm)
 - Manganese (ppm)
 - Particle Size Analysis or
USDA Textural Estimate (%)
- g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.
- h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

SEWAGE SLUDGE APPLICATION AGREEMENT (N/A)

This sewage sludge application agreement is made on this date _____ between _____, referred to here as "landowner", and _____, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of sewage sludge on landowner's land in amounts and in a manner authorized by VPDES permit number _____ which is held by the Permittee.

Landowner acknowledges that the appropriate application of sewage sludge will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health, the following site restrictions must be adhered to when sewage sludge receives Class B treatment for pathogen reduction:

1. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;
2. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil;
3. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil;
4. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge;
5. Animals shall not be grazed on the land for 30 days after application of sewage sludge;
6. Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;
7. Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;
8. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
9. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).

Permittee agrees to notify landowner or landowner's designee of the proposed schedule for sewage sludge application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:

Signature

Mailing Address

Permittee:

Signature

Mailing Address

SECTION D. SURFACE DISPOSAL (N/A)

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

1. Information on Active Sewage Sludge Units.

- a. Unit name or number:
- b. Unit location
 - i. Street or Route#:
County:
City or Town: _____ State: _____ Zip: _____
 - ii. Latitude: _____ Longitude: _____
Method of latitude/longitude determination
_____ USGS map _____ Filed survey _____ Other _____
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
- d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:
_____ dry metric tons.
- e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:
_____ dry metric tons.
- f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1×10^{-7} cm/sec? ☐ Yes ☐ No If yes, describe the liner or attach a description.
- g. Does the active sewage sludge unit have a leachate collection system? ☐ Yes ☐ No
If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
- h. If you answered no to either f or g, answer the following:
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? ☐ Yes ☐ No If yes, provide the actual distance in meters:
- i. Remaining capacity of active sewage sludge unit, in dry metric tons: _____ dry metric tons
Anticipated closure date for active sewage sludge unit, if known: _____ (MM/DD/YYYY)
Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

2. Sewage Sludge from Other Facilities.

Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? ☐ Yes ☐ No

If yes, provide the following information for each such facility, attach additional sheets as necessary.

- a. Facility name:
- b. Facility contact:
Title:
Phone: ()
- c. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:
Permit Number: _____ Type of Permit: _____

- e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
☐ Class A ☐ Class B ☐ Neither or unknown
- f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:

- g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)
 - ☐ Option 2 (Anaerobic process, with bench-scale demonstration)
 - ☐ Option 3 (Aerobic process, with bench-scale demonstration)
 - ☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 - ☐ Option 5 (Aerobic processes plus raised temperature)
 - ☐ Option 6 (Raise pH to 12 and retain at 11.5)
 - ☐ Option 7 (75 percent solids with no unstabilized solids)
 - ☐ Option 8 (90 percent solids with unstabilized solids)
 - ☐ None or unknown
- h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:
- i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:
3. Vector Attraction Reduction.
- a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
- ☐ Option 9 (Injection below land surface)
 - ☐ Option 10 (Incorporation into soil within 6 hours)
 - ☐ Option 11 (Covering active sewage sludge unit daily)
- b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:
4. Ground Water Monitoring.
- a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? ☐ Yes ☐ No
If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
- b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
☐ Yes ☐ No If yes, submit a copy of the ground water monitoring program with this application.
- c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? ☐ Yes ☐ No
If yes, submit a copy of the certification with this application.
5. Site-Specific Limits.
- Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
☐ Yes ☐ No If yes, submit information to support the request for site-specific pollutant limits with this application.

All applicants must sign the certification statement below

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: .

Name: Jacob Porter

Title: Special Facilities Program Manager, Asset Management Division, VDOT

Telephone number: (804) 662-9615

Date Signed: 12/07/07.

VPDES Permit Application Addendum

1. Entity to whom the permit is to be issued: Virginia Department of Transportation
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Is this facility within city or town boundaries? Y / ☒ N
3. Provide the tax map parcel number for the land where the discharge is located. 32-94A
4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to construction activities? None
5. What is the design average effluent flow of this facility? 0.036 MGD

For industrial facilities, provide the max. 30-day average production level, include units: N/A

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / ☒ N

If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow capacity greater than your current flow?

6. Nature of operations generating wastewater:

Domestic

100% of flow from domestic connection/sources

Number of private residences to be served by the treatment works: Rest Area

0% of flow from non-domestic connection/sources

7. Mode of discharge: ☒ Continuous ☐ Intermittent ☐ Seasonal
Describe frequency and duration of intermittent or seasonal discharges: N/A
8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

☒ Permanent stream, never dry

☐ Intermittent stream, usually flowing, sometimes dry

☐ Ephemeral stream, wet-weather flow, often dry

☐ Effluent-dependent stream, usually or always dry without effluent flow

☐ Lake or pond at or below discharge point

☐ Other: _____

9. Approval Date(s):
O&M Manual 07/26/2004 Sludge/Solids Management Plan N/A

Have there been any changes in your operations or procedures since the above approval dates? Y / ☒ N

The proposed changes include the addition of a headworks channel grinder, an 18,000 gallon equalization basin, and a UV disinfection unit.

Please submit this completed form with your application
Maintenance fee billing will be sent using this information

Permit Maintenance Fee Information

(1) Facility Name: VDOT Brunswick County Rest Area

(2) Permit Number:

VA0061379

(Please indicate all VPDES individual permit numbers applicable for the information listed below)

(3) Tax Payer ID [FIN]: N/A

(4) Billing Information:

Corporation Name or Owner Name: Virginia Department of Transportation

Corporate Billing Address or Owner Address: 1401 East Broad Street
Richmond, VA 23219

(5) Billing Contact:

Name: Jacob Porter

Title: Special Facilities Program Manager, Asset Management Division, VDOT

Phone Number: (804) 662-9615

E-mail address: Jacob.Porter@VDOT.Virginia.gov

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT APPLICATION FEE FORM
EFFECTIVE JULY 1, 2004

INSTRUCTIONS

Applicants for individual Virginia Pollutant Discharge Elimination System (VPDES), Virginia Pollution Abatement (VPA), Virginia Water Protection (VWP), Surface Water Withdrawal (SWW), and Ground Water Withdrawal (GWW) Permits are required to pay permit application fees, except farming operations engaged in production for market. Fees are also required for registration for coverage under General Permits except for the general permits for sewage treatment systems with discharges of 1,000 gallons per day (GPD) or less and for Corrective Action Plans for leaking underground storage tanks. Except for VWP permits, fees must be paid when applications for permit issuance, reissuance* or modification are submitted. Applicants for VWP permits will be notified by the DEQ of the fee due. Applications will be considered incomplete if the proper fee is not paid and will not be processed until the fee is received. (* - the reissuance fee does not apply to VPDES and VPA permits - see the fee schedule included with this form for details.)

The permit fee schedule is included with this form. Fees for permit issuance or reissuance and for permit modification are included. Once you have determined the fee for the type of application you are submitting, complete this form. The original copy of the form and your check or money order payable to "Treasurer of Virginia" should be mailed to:

Department of Environmental Quality
Receipts Control
P.O. Box 1104
Richmond, VA 23218

A copy of the form and a copy of your check or money order should accompany the permit application. You should retain a copy for your records. Please direct any questions regarding this form or fee payment to the DEQ Office to which you are submitting your application.

APPLICANT NAME: Virginia Department of Transportation **SSN/FIN:** N/A

ADDRESS: 1401 East Broad Street **DAYTIME PHONE:** (804) 662-9615
Richmond, VA 23219 **Area Code**

FACILITY/ACTIVITY NAME: VDOT Brunswick County Rest Area

LOCATION: Brunswick County, Virginia

TYPE OF PERMIT APPLIED FOR
(from Fee Schedule): VPDES Municipal Minor/1,001 GPD - 10,000 GPD

TYPE OF ACTION: New Issuance ✓ Reissuance Modification

AMOUNT OF FEE SUBMITTED
(from Fee Schedule): (Annual Permit Maintenance Fee)

EXISTING PERMIT NUMBER (if applicable): VA0061379

DEQ OFFICE TO WHICH APPLICATION SUBMITTED (check one)

<input type="checkbox"/> Abingdon/SWRO	<input type="checkbox"/> Harrisonburg/VRO	<input type="checkbox"/> Woodbridge/NVRO	<input type="checkbox"/> Lynchburg/SCRO
<input checked="" type="checkbox"/> Richmond/PRO	<input type="checkbox"/> Richmond/Headquarters	<input type="checkbox"/> Roanoke/WCRO	<input type="checkbox"/> Virginia Beach/TRO

FOR DEQ USE ONLY
Date: _____
DC #: _____

Original Form and Check - DEQ Receipts Control, Richmond
Copy of Form and Copy of Check - DEQ Regional Office or Permit
Program Office

FEE SCHEDULES

A. VPDES and VPA Permits. Applications for issuance of new individual VPDES or VPA permits, and for permittee initiated major modifications that occur (and become effective) before the stated permit expiration date. (Flows listed are facility "design" flows. Land application rates listed are facility "design" rates.) [NOTE: VPDES and VPA permittees pay an Annual Permit Maintenance Fee instead of a reapplication fee. The permittee is billed separately by DEQ for the Annual Permit Maintenance Fee.]

TYPE OF PERMIT	ISSUANCE	MODIFICATION
VPDES Industrial Major	\$24,000	\$12,000
VPDES Municipal Major	\$21,300	\$10,650
VPDES Municipal Major Stormwater / MS4 These permits are now issued by DCR.	\$21,300	\$10,650
VPDES Industrial Minor / No Standard Limits	\$10,200	\$5,150
VPDES Industrial Minor / Standard Limits	\$3,300	\$3,300
VPDES Industrial Stormwater	\$7,200	\$3,600
VPDES Municipal Minor / Greater Than 100,000 GPD	\$7,500	\$3,750
VPDES Municipal Minor / 10,001 GPD - 100,000 GPD	\$6,000	\$3,000
VPDES Municipal Minor / 1,001 GPD - 10,000 GPD	\$5,400	\$2,700
VPDES Municipal Minor / 1,000 GPD or Less	\$2,000	\$1,000
VPDES Municipal Minor Stormwater / MS4 These permits are now issued by DCR.	\$2,000	\$1,000
VPA Industrial Wastewater Operation / Land Application of 10 or More Inches Per Year	\$15,000	\$7,500
VPA Industrial Wastewater Operation / Land Application of Less Than 10 Inches Per Year	\$10,500	\$5,250
VPA Industrial Sludge Operation	\$7,500	\$3,750
VPA Municipal Wastewater Operation	\$13,500	\$6,750
VPA Municipal Sludge Operation	\$7,500	\$3,750
All other VPA operations not specified above	\$750	\$375

B. Virginia Water Protection (VWP) Permits. Applications for issuance of new individual, and reissuance or major modification of existing individual VWP permits. Only one permit application fee will be assessed per application; for a permit application involving more than one of the operations described below, the governing fee shall be based upon the primary purpose of the proposed activity. (Withdrawal amounts shown are maximum daily withdrawals.)

TYPE OF PERMIT	ISSUANCE/REISSUANCE	MODIFICATION
VWP Individual / Surface Water Impacts (Wetlands, Streams and/or Open Water)	\$2,400 plus \$220 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) (\$60,000 maximum)	\$1,200 plus \$110 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) (\$30,000 maximum)
VWP Individual / Minimum Instream Flow - Withdrawals equal to or greater than 3,000,000 gallons on any day	\$25,000	\$5,000
VWP Individual / Minimum Instream Flow - Withdrawals between 2,000,000 and 2,999,999 gallons on any day	\$20,000	\$5,000
VWP Individual / Minimum Instream Flow - Withdrawals between 1,000,000 and 1,999,999 gallons on any day	\$15,000	\$5,000
VWP Individual / Minimum Instream Flow - Withdrawals < 1,000,000 gallons on any day that do not otherwise qualify for a general VWP permit for water withdrawals	\$10,000	\$5,000
VWP Individual / Reservoir - Major	\$35,000	\$12,500
VWP Individual / Reservoir - Minor	\$25,000	\$12,500
VWP Individual/Nonmetallic Mineral Mining	\$2,400 plus \$220 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) (\$7,500 maximum)	\$1,200 plus \$110 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) (\$3,750 maximum)

C. Surface Water Withdrawal (SWW) and Ground Water Withdrawal (GWW) Permits. Applications for issuance of new individual, and reissuance or major modification of existing individual SWW permits or GWW permits.

TYPE OF PERMIT	ISSUANCE/REISSUANCE	MODIFICATION
Surface Water Withdrawal	\$12,000	\$6,000
Ground Water Withdrawal / Initial Permit for an Existing Withdrawal Based Solely on Historic Withdrawals	\$1,200	\$600
Ground Water Withdrawal	\$6,000	\$3,000

D. Registration Statements (VPDES and VPA permits) or Applications (VWP permits) for General Permit Coverage.

- Except as specified in 2, 3, 4 and 5 below, the fee for registration for coverage under a general permit is \$600.
- General VPDES Permit for Domestic Sewage Discharges of Less Than or Equal to 1,000 GPD (9 VAC 25-110) = \$0.
General VPDES Permit Regulation for Discharges From Petroleum Contaminated Sites (9 VAC 25-120) = \$0.

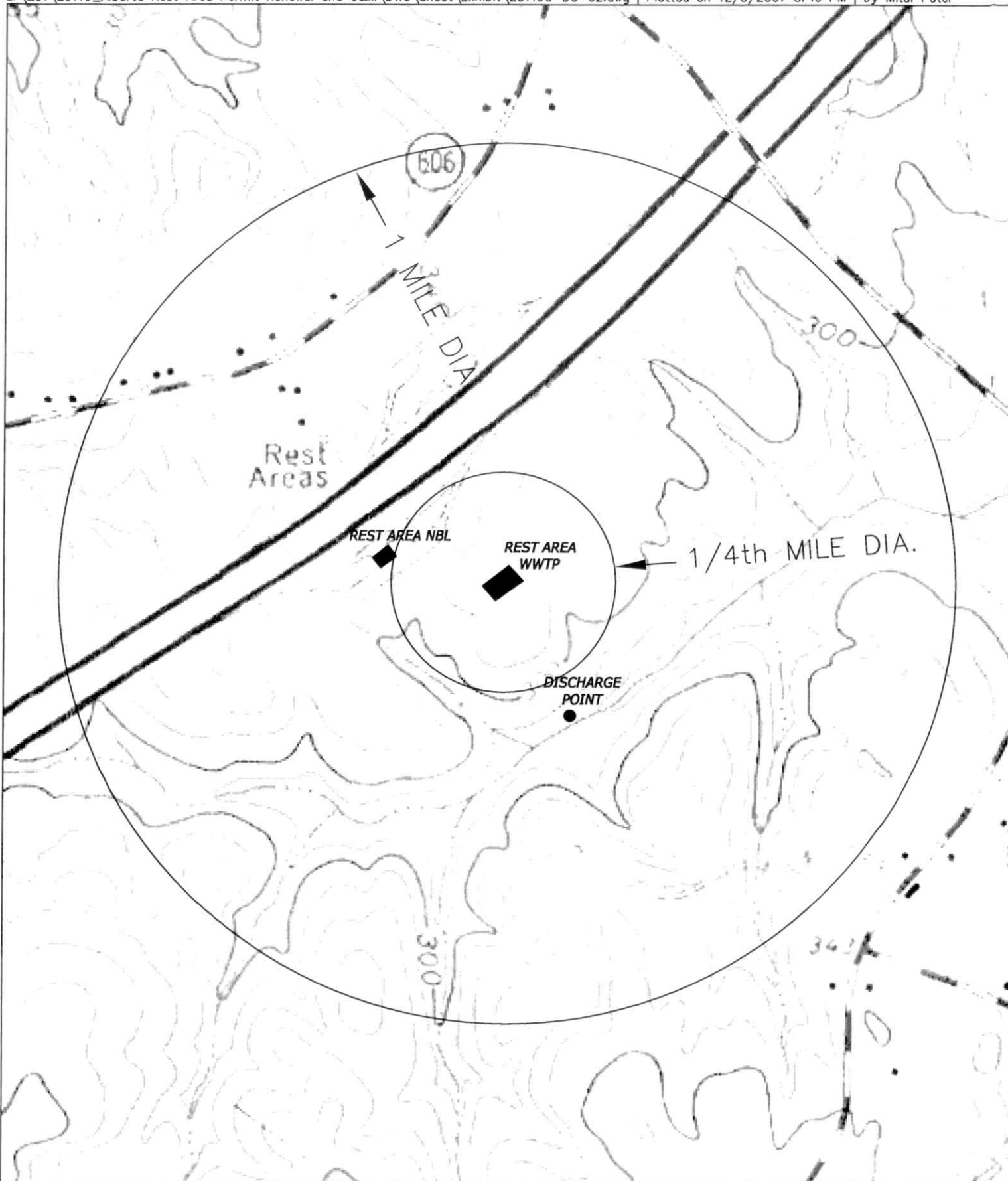
3. VWP General Permit:

TYPE OF PERMIT	ISSUANCE
VWP General / Less Than 4,356 sq. ft. (1/10 acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	\$0
VWP General / 4,356 sq. ft. to 21,780 sq. ft. (1/10 acre to 1/2 acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	\$600
VWP General / 21,781 sq. ft. to 43,560 sq. ft. (greater than 1/2 acre to one acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	\$1,200
VWP General / 43,561 sq. ft. to 87,120 sq. ft. (greater than one acre to two acres) of Surface Water Impact (Wetlands, Streams and/or Open Water)	\$1,200 plus \$120 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 43,560 sq. ft. (one acre) (\$2,400 maximum)
VWP General / Minimum Instream Flow / Reservoir - Water withdrawals and/or pond construction	\$2,400

4. VPDES Storm Water General Permits (except as specified in 5 below):

TYPE OF PERMIT	ISSUANCE
VPDES General / Industrial Storm Water Management	\$500
VPDES General / Storm Water Management - Phase I Land Clearing ("Large" Construction Activity - Sites or common plans of development equal to or greater than 5 acres) These permits are now issued by DCR.	\$500
VPDES General / Storm Water Management - Phase II Land Clearing ("Small" Construction Activity - Sites or common plans of development less than 5 Acres) These permits are now issued by DCR.	\$300

- Owners of facilities that are covered under the Industrial Activity (VAR5) and Construction Site (VAR10) storm water general permits that expire on June 30, 2004, and who are reapplying for coverage under the new general permits that are effective on July 1, 2004, must submit a fee of \$600 to reapply.



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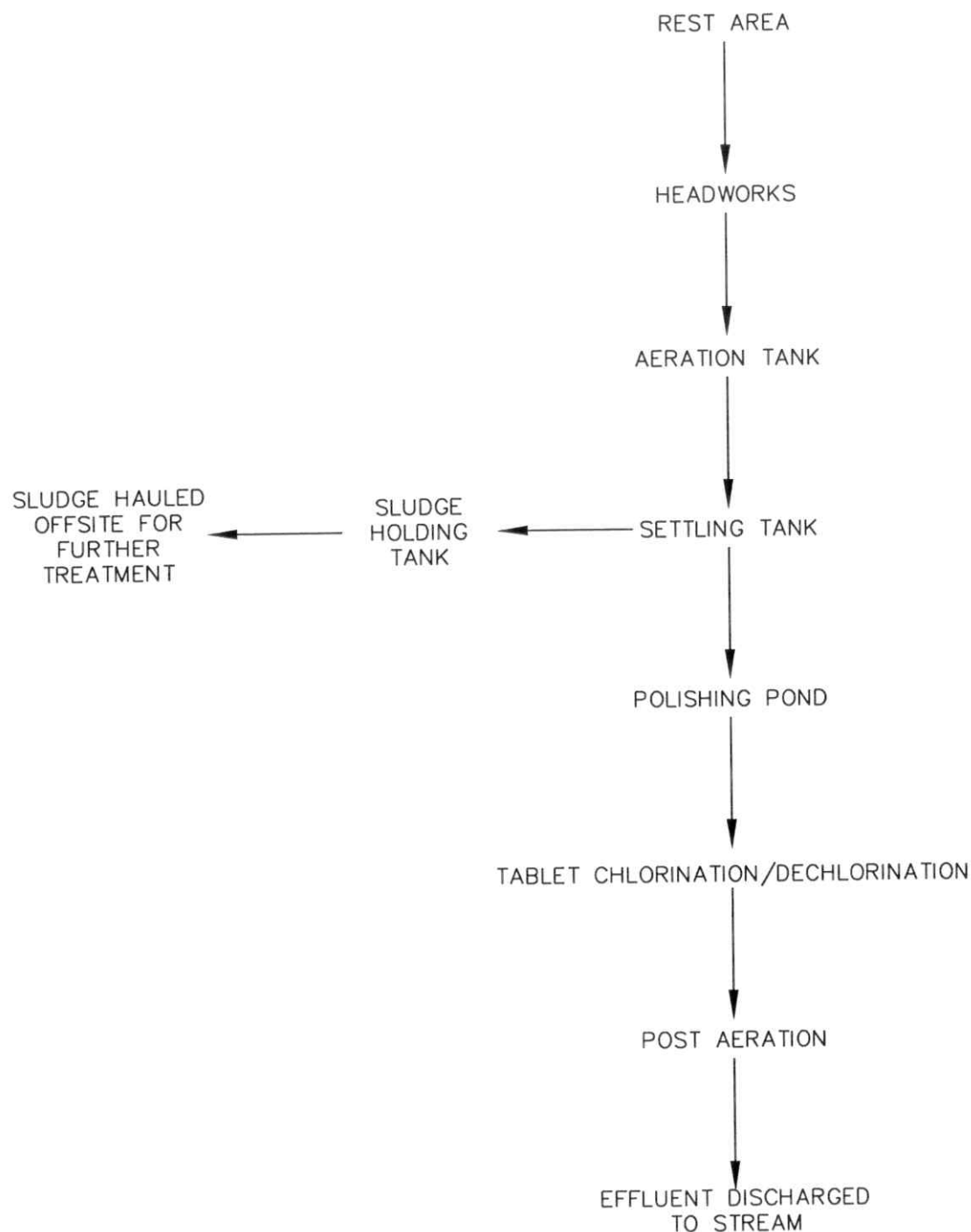
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THIS DRAWING PREPARED AT THE
CORPORATE OFFICE
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
TEL 804.200.6500 FAX 804.560.1816 www.timmons.com

Site Development | Residential | Infrastructure | Technology

JOB NO. 25119	VDOT BRUNSWICK REST AREA WWT BRUNSWICK COUNTY, VA TOPOGRAPHIC MAP	SCALE 1" = 750'	DATE 12/05/2007	DATE	REVISION DESCRIPTION
SHEET NO. F		CHECKED BY JM	DRAWN BY MCP	DESIGNED BY MCP	

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1001 Boulders Parkway | Richmond, VA 23225
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VDOT BRUNSWICK COUNTY REST AREA

BRUNSWICK COUNTY, VIRGINIA

LINE DIAGRAM

DRAWN BY	S. SCOTT
DESIGNED BY	M. PATE
CHECKED BY	I. MUTO

DATE 12/07	DATE	

[illegible]

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Jacob Porter/Asset Management Division

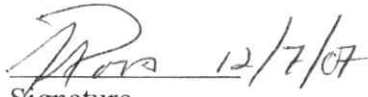
Owner: Virginia Department of Transportation

Applicant's Address: 1401 East Broad Street

Richmond, VA 23219

Agent's Telephone No: (804) 662-9615

Authorizing Agent:


Signature

Facility Name: VDOT Brunswick County Rest Area

Permit No.: VA0061379

Bauer,Jaime

From: Mitul Patel [Mitul.Patel@timmons.com]
Sent: Monday, June 09, 2008 9:15 AM
To: Bauer,Jaime
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Jamie,

It was an error from my part. The actual population serves is 7200 per day based on 5 gpd/person/day.

Thanks,
Mitul C. Patel, E.I.T
Project Engineer III

TIMMONS GROUP

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1001 Boulders Parkway
Suite 300
Richmond, VA 23225
Tel: 804.200.6470
Fax: 804.560.1431
E-mail: mitul.patel@timmons.com
www.timmons.com

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]
Sent: Friday, June 06, 2008 4:37 PM
To: Mitul Patel
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Mitul,

One more item has been identified as a discrepancy in the permit application. In Form 2A – Section A.4, the population served is identified as 7200 per day. In the sludge application in Appendix B, Section A.1.g, the population served is identified as 2800 per day. These numbers should match. Please confirm via email which is the correct size of the population for the I-85 Rest Area.

If you have any questions, please let me know.

Thanks,

Jaime

-----Original Message-----

From: Mitul Patel [mailto:Mitul.Patel@timmons.com]
Sent: Thursday, June 05, 2008 11:46 AM
To: Bauer,Jaime
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Jamie,

Please find attached the test results for January 2008 as per your request.

Thanks,

6/9/2008

Bauer,Jaime

From: Mitul Patel [Mitul.Patel@timmons.com]
Sent: Thursday, June 05, 2008 11:46 AM
To: Bauer,Jaime
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Jamie,

Please find attached the test results for January 2008 as per your request.

Thanks,
Mitul C. Patel, E.I.T
Project Engineer III

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Fax: 804.560.1431
E-mail: mitul.patel@timmons.com
www.timmons.com

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]
Sent: Thursday, June 05, 2008 11:38 AM
To: Mitul Patel
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Mitul,

When going through the application one last time, I realized that I never received the fecal test that was taken in January 2008. This would make 3 fecal coliform tests, two of which are more than 4 months apart, which is the permit application requirement. Please send me the January 2008 test results as soon as possible. If you have any questions, please let me know.

Jaime

-----Original Message-----

From: Mitul Patel [mailto:Mitul.Patel@timmons.com]
Sent: Wednesday, May 28, 2008 4:11 PM
To: Bauer,Jaime
Cc: Greg Isaacs; Campbell, A. Allen (VDOT); Porter, Jacob A. 'Jake' (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Jamie,

I have attached the two coliform test results for the Alberta Rest Area WWTP as a part of the VPDES permit requirement. I hope that this fulfills all the requirements for the permit renewal application. Please let me know if you have any questions.

Sincerely,
Mitul C. Patel, E.I.T
Project Engineer III

6/6/2008

TO Timmons Group

ATT Ignatius mutoti
OR

mitul Patel

FROM D.T.H. Alberta Rest Area

Fecal Coliform Sample

1-8-08 1-09-08

1-10-08

B and B Consultants, Inc.
316 East Third Street
Chase City, VA 23924
(434) 372-3393

CERTIFICATE OF ANALYSIS

DATE: 17-Jan-08

CLIENT: LONG & ASSOCIATES
CONTACT: CODY LONG
ADDRESS: P O BOX 300
AYLETT, VA 23009

SAMPLE ID #: 8-0096	SAMPLE LOCATION: ALBERTA REST AREA
SAMPLE DATE: 1/9/08	SAMPLE TIME: 11:20
DATE RECEIVED: 1/9/08	TIME RECEIVED: 13:19
SAMPLE TYPE: GRAE	COLLECTED BY: JEFF SWENSON

[illegible]

VALUES ARE IN MG/L
pH = S.G.
COLIFORM = C/100 ml

SAMPLE CONDITION
(X) GOOD
() OTHER (SEE C-O-C)

REVIEWED BY:

Dennis Lopez

Bauer,Jaime

From: Mitul Patel [Mitul.Patel@timmons.com]
Sent: Wednesday, May 28, 2008 4:11 PM
To: Bauer,Jaime
Cc: Greg Isaacs; Campbell, A. Allen (VDOT); Porter, Jacob A. 'Jake' (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area Permit Renewal

Jamie,

I have attached the two coliform test results for the Alberta Rest Area WWTP as a part of the VPDES permit requirement. I hope that this fulfills all the requirements for the permit renewal application. Please let me know if you have any questions.

Sincerely,

Mitul C. Patel, E.I.T
Project Engineer III

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Fax: 804.560.1431
E-mail: mitul.patel@timmons.com
www.timmons.com

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]
Sent: Wednesday, May 28, 2008 3:36 PM
To: Mitul Patel
Subject: RE: VA0061379 - VDOT I85 Rest Area

Hi, Mitul,

I just wanted to follow up on the fecal coliform samples required by Form 2A. I noticed that the DMR for the April monitoring period indicated that the samples were taken. I will need to have this data submitted separately from the DMR. If you have any questions, please let me know.

Jaime

-----Original Message-----

From: Mitul Patel [mailto:Mitul.Patel@timmons.com]
Sent: Tuesday, April 29, 2008 10:02 AM
To: Bauer,Jaime
Cc: Greg Isaacs; buck@dthcsi.com; Campbell, A. Allen (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area

Jamie,

That should be fine. The outfall location at the Alberta WWTP is at a walkable distance. I will make arrangements for you to walk to the outfall location.

Sincerely,

Mitul C. Patel, E.I.T
Project Engineer III

6/2/2008

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E-mail: mitul.patel@timmons.com

www.timmons.com

From: Bauer,Jaime [<mailto:jlbauer@deq.virginia.gov>]

Sent: Tuesday, April 29, 2008 9:42 AM

To: Mitul Patel

Subject: RE: VA0061379 - VDOT I85 Rest Area

Just so that you know, I would like to walk down the outfall location/creek if we can.

-----Original Message-----

From: Mitul Patel [<mailto:Mitul.Patel@timmons.com>]

Sent: Tuesday, April 29, 2008 9:38 AM

To: Bauer,Jaime

Cc: Greg Isaacs; Longandassoc@aol.com; buck@dhcsi.com; Campbell, A. Allen (VDOT)

Subject: RE: VA0061379 - VDOT I85 Rest Area

Jamie,

May 6th at 11 a.m. should be fine. I will coordinate the change in timing with all other parties.

Thanks,

Mitul C. Patel, E.I.T

Project Engineer III

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Suite 300

Richmond, VA 23225

Tel: 804.200.6470

Fax: 804.560.1431

E-mail: mitul.patel@timmons.com

www.timmons.com

From: Bauer,Jaime [<mailto:jlbauer@deq.virginia.gov>]

Sent: Tuesday, April 29, 2008 9:32 AM

To: Bauer,Jaime; Mitul Patel

Cc: Greg Isaacs; Longandassoc@aol.com; buck@dhcsi.com; Campbell, A. Allen (VDOT)

Subject: RE: VA0061379 - VDOT I85 Rest Area

Mitul,

I was wondering if we could push the meeting back until 11 am on May 6th? Please let me know as soon as possible. Thank you.

Jaime

-----Original Message-----

From: Bauer,Jaime
Sent: Friday, April 18, 2008 1:54 PM
To: 'Mitul Patel'
Cc: Greg Isaacs; Longandassoc@aol.com; buck@dthcsi.com; Campbell, A. Allen (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area

May 6th at 10 am will be fine. Thank you.

-----Original Message-----

From: Mitul Patel [mailto:Mitul.Patel@timmons.com]
Sent: Friday, April 18, 2008 1:52 PM
To: Bauer,Jaime
Cc: Greg Isaacs; Longandassoc@aol.com; buck@dthcsi.com; Campbell, A. Allen (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area

Jamie,

I talked to the operator, Mr. Cody Long, and he informed that he is available May 6th. He prefers the morning timing around 10 a.m. Please let me know if this date suites you. If not than please suggest an alternative date that doesn't fall on a Monday or a Friday.

Thanks,
Mitul C. Patel, E.I.T
Project Engineer III

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Fax: 804.560.1431
E-mail: mitul.patel@timmons.com
www.timmons.com

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]
Sent: Friday, April 18, 2008 11:34 AM
To: Mitul Patel
Cc: Greg Isaacs; Longandassoc@aol.com; buck@dthcsi.com; Campbell, A. Allen (VDOT)
Subject: RE: VA0061379 - VDOT I85 Rest Area

Thank you for the information.

My site visit is to acquaint myself with the system since I have never been to the facility before. It is not necessary for me to meet with anyone but the plant operator, but the Timmons Group is welcome to join us. My schedule over the next two or three weeks is a little hectic. I am available for a site visit on the following days: April 25th, May 6th, and anytime the week of May 12th. Please let me know when would be the best time for the others.

I assume we will be getting the fecal coliform test results to complete the application in the next few weeks?

If you have any other questions, please let me know.

Jaime

-----Original Message-----

From: Mitul Patel [mailto:Mitul.Patel@timmons.com]
Sent: Friday, April 18, 2008 11:07 AM
To: Bauer,Jaime
Cc: Greg Isaacs; Longandassoc@aol.com; buck@dthcsi.com; Campbell, A. Allen (VDOT)
Subject: FW: VA0061379 - VDOT I85 Rest Area

Dear Ms. Bauer,

Thanks for your inquiry. Answering your questions:

- 1) The post aeration system at the Alberta RA is diffused aeration. A set of blowers provide the air for the diffusers.
- 2) No chemical is used for pH adjustment. However soda ash is used for alkalinity addition, when required.

Please let me know if I have answered your questions appropriately and does it involve changing anything in the permit application. Timmons Group & the plant operator are planning to be present during your site visit. I will call you to schedule a time and date, so that all parties can be present. Just to let you know that Ignatius Mutoti is no longer with Timmons Group. Please contact myself or Greg Isaacs (greg.isaacs@timmons.com) in the future.

Sincerely,
Mitul C. Patel, E.I.T
Project Engineer III

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Richmond, VA 23225
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Fax: 804.560.1431
E-mail: mitul.patel@timmons.com
www.timmons.com

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]
Sent: Tuesday, April 15, 2008 10:40 AM
To: Jim Christian
Subject: VA0061379 - VDOT I85 Rest Area

Hi, Ignatius,

I am currently working on the VDOT I-85 Brunswick County Rest Area VPDES permit. I have two questions which I hope you can answer for me. First, what type of post aeration system is present at the facility? Is it a passive system, such as cascading steps? Secondly, is pH adjusted by chemical addition?

I would like to schedule a time to come out and perform a site visit. Please let me know who I should contact in order to do this.

Thanks for your help,

Jaime

-----Original Message-----

From: Ignatius Mutoti [mailto:Ignatius.Mutoti@timmons.com]
Sent: Tuesday, January 29, 2008 5:11 PM

To: Bauer,Jaime

Cc: Mitul Patel; Campbell, A. Allen (VDOT); Buck Godwin;
longandassoc@aol.com

Subject: RE: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

Jaime - I do not have a copy of the DEQ acceptance letter for the Chlorination Efficacy, but I have sent word around to VDOT to try and locate that letter is it exists. My guess is that if DEQ does not have record of issuance of that letter, then VDOT may not have the letter as well. Can you please contact Ms Oula Shehab at DEQ as the letter was addressed to her; she may have be able to tell us what happened.

Thanks

TIMMONS GROUP

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Ignatius Mutoti PhD, PE. Process Engineer

From: Bauer,Jaime [mailto:jlbauer@deq.virginia.gov]

Sent: Tuesday, January 29, 2008 10:41 AM

To: Ignatius Mutoti

Cc: Mitul Patel

Subject: RE: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

Ignatius,

I have not been able to locate documentation from DEQ that the chlorine study was accepted as a substitute for E-coli monitoring. Do you have a copy of anything from us on this subject?

Jaime

-----Original Message-----

From: Ignatius Mutoti [mailto:Ignatius.Mutoti@timmons.com]

Sent: Wednesday, January 23, 2008 6:24 PM

To: Bauer,Jaime

Cc: Mitul Patel

Subject: Re: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

Jamie - can please proceed with the request for waiver. In the meantime, the operator has completed the initial test for fecals. Another one will be completed 4 months from now. We'll submit the test results to you for information/verification purposes.

Thank you

----- Original Message -----

From: Bauer,Jaime <jlbauer@deq.virginia.gov>

To: Ignatius Mutoti

Cc: Mitul Patel

Sent: Wed Jan 23 14:53:54 2008

Subject: RE: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

Ignatius,

Thanks for the e-mail. I think, however, that this issue is different than the one that we have been discussing. The fecal coliform requirements in the permit application are a federal requirement. I think that the issue below is related to EPA and DEQ's opinions of establishing the relationship between chlorine and e-coli or enterococci.

This morning I received your letter dated January 16th requesting a waiver from the fecal coliform testing requirements. Based on our correspondence on January 17th it was my understanding that VDOT was going to proceed with taking the fecal coliform samples. Should I just ignore the January 16th letter or would you like me to proceed with processing a waiver request? As I stated last week, because there are several months until the expiration of the I-85 Rest Area permit, it is unlikely that a waiver request will be approved.

If you have any questions, please let me know.

Jaime

-----Original Message-----

From: Ignatius Mutoti [<mailto:Ignatius.Mutoti@timmons.com>]

Sent: Wednesday, January 23, 2008 1:02 PM

To: Bauer,Jaime

Cc: Mitul Patel

Subject: Fw: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

Jamie - I just received this and thought it might be of interest to you visa-a-vis Alberta VPDES permit renewal

Thanks
Ignatius

----- Original Message -----

From: Morel, Meghan <mmorel@aqualaw.com>

To: Morel, Meghan <mmorel@aqualaw.com>

Cc: Sharon Nicklas <snicklas@hrsd.com>

Sent: Wed Jan 23 11:34:21 2008

Subject: VAMWA: VPDES Bacteria Monitoring Changes -- RESPONSE REQUESTED

VAMWA Members and Consultants:

VAMWA Permits Committee Chair Sharon Nicklas of HRSD has brought to our attention potential changes by DEQ in bacteria monitoring required by VDPES permits. If you have any information responsive to the following questions, please respond to Sharon at snicklas@hrsd.com (copied above) with a copy to me at mmorel@AquaLaw.com :

1. Has you received an e.coli or enterococcus limit in your VPDES permit in the

6/2/2008

past 4 months despite submitting data showing that chlorine residual monitoring is an adequate surrogate?

2. Do you have a permit that is currently open for renewal and the draft permit contains a limit despite the chlorine data (or your permit writer has told you that you will be getting a limit despite the chlorine data)?

Thank you.

Meghan F. Morel

Client & Government Relations Coordinator

AquaLaw PLC

Tel: (804) 716-9021 ext.5

www.AquaLaw.com

B and B Consultants, Inc.
316 East Third Street
Chase City, VA 23924
(434) 372-3393

CERTIFICATE OF ANALYSIS

DATE: 17-Jan-08

CLIENT: LONG & ASSOCIATES
CONTACT: CODY LONG
ADDRESS: PO BOX 300
AYLETT, VA 23009

SAMPLE ID #:	8-0066	SAMPLE LOCATION:	ALBERTA REST AREA
SAMPLE DATE:	1/8/08	SAMPLE TIME:	12:30
DATE RECEIVED:	1/8/08	TIME RECEIVED:	14:05
SAMPLE TYPE:	GRAB	COLLECTED BY:	JEFF SWENSON

PARAMETER	RESULTS	DATE OF ANALYSIS	TIME OF ANALYSIS	METHOD	ANALYST NAME
BOD	14	1/9/08	10:52	SM18 5210B	A.A.
TSS	12	1/14/08	09:46	SM18 2540D	A.A.
AMMONIA	0.22	1/14/08	14:30	SM18 4500-NH ₄ B + C	D.L.
FECAL COLIFORM	<1	1/8/08	14:36	SM18 9222D	A.A.

VALUES ARE IN MG/L
pH = S.U.
COLIFORM = C/100 ml

SAMPLE CONDITION
(X) GOOD
() OTHER (SEE C-C-C)

REVIEWED BY:

Dennis Long

PAGE 01
PAGE 01

B and B Consultants, Inc.
316 East Third Street
Chase City, VA 23924
(434) 372-3393

CERTIFICATE OF ANALYSIS

DATE: 16-Apr-08

CLIENT: LONG & ASSOCIATES
CONTACT: CODY LONG
ADDRESS: P O BOX 300
AYLETT, VA 23009

SAMPLE ID #:	8-0919	SAMPLE LOCATION:	ALBERTA REST AREA
SAMPLE DATE:	4/8/08	SAMPLE TIME:	11:25
DATE RECEIVED:	4/8/08	TIME RECEIVED:	11:35
SAMPLE TYPE:	GRAB	COLLECTED BY:	JEFF SWENSON

[illegible]

VALUES ARE IN MG/L
pH = S.U.
COLIFORM = C/100 ml

SAMPLE CONDITION
(X) GOOD
() OTHER (SEE C-O-C)

REVIEWED BY:

Denise Longo